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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,780	10/12/2001	Tuomo Syvanne	BER-021	2214

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EXAMINER	
ALI, MOHAMMAD	

ART UNIT	PAPER NUMBER
2167	

DATE MAILED: 03/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/976,780	SYVANNE, TUOMO	
	Examiner	Art Unit	
	Mohammad Ali	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) *7-12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 13-17* is/are rejected.

7)☒ Claim(s) *1,2,15 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4-22-02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to the Election made on 10/07/04.

The application has been examined. Claims 1-17 are pending in this Office Action. Applicant's elected Group I, claims 1-6 and 13-17 with traverse and cancels claims 7-12.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1, 2, 15 and 17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. These claims are not in Technological Arts, since no technology is recited.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-6 and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ke et al. ('Ke' hereinafter), PCT US00/08708 in view of Michael Coss ('Coss' hereinafter), EP 0909075 A1.

With respect to claim 1,

Ke discloses a method for processing data packets in a gateway element, said method comprising (see page 3, lines 10-24) the steps of:

providing screening information comprising a set of rules (see page 3, lines 30-34), and

said screening information is hierarchically structured so that it comprises a first rule, which specifies first header information, and a subset of rules relating to said first rule (see page 3, lines 30-33 et seq), and in that

comparing a data packet, to said subset of rules only if the header information of the data packet matches the header information of said first rule (see col. 8, lines 9-21 et seq).

processing a data packet according to a rule belonging to the set of rules (see page 5, lines 4-10 et seq), belonging to the set of rules (see page 3, lines 30-33 et seq), the header information of said data packet matching the header information of said rule (see page 8, lines 9-21, Fig. 1).

Ke does not explicitly indicate the claimed "hierarchical structure".

Coss discloses the claimed hierarchical structure (calling for inclusion of packet packet data from certain different category "hierarchical", see page 7, lines 45-50, Fig. 8).

It would have been obvious to one ordinary skill in the gateway network processing art at the time of the present invention to combined the cited references because the hierarchical structure of Coss teachings would have allowed Ke's system to improve the processing efficiency, security in the rule based information, as

suggested by Coss, at page 3, lines 35-41 et seq. Hierarchical structure as taught by Coss improves the rule set applied to any packet to determine information as incoming and outgoing network interface (see page 3, lines 39-41 et seq, Coss).

Claim 2 has same scope of claim 1 except said subset of rules comprises a second rule, which specifies second header information, and a second subset of rules, said second subset of rules relating to said second rule (see page 3, lines 29 to page 4, lines 20), and in that in said step of comparing a data packet, said data packet is compared to said second subset of rules only, if the header information or the data packet matches the header information of the second rule (see page 8, lines 9-21 et seq) and essentially rejected for the rationale as discussed in claim 1.
Ke does not explicitly indicate the claimed "hierarchical structure".

Coss discloses the claimed hierarchical structure (calling for inclusion of packet packet data from certain different category "hierarchical", see page 7, lines 45-50, Fig. 8).

It would have been obvious to one ordinary skill in the gateway network processing art at the time of the present invention to combined the cited references because the hierarchical structure of Coss teachings would have allowed Ke's system to improve the processing efficiency, security in the rule based information, as suggested by Coss, at page 3, lines 35-41 et seq. Hierarchical structure as taught by Coss improves the rule set applied to any packet to determine information as incoming and outgoing network interface (see page 3, lines 39-41 et seq, Coss).

As to claim 3,

Ke teaches said set of rules is an ordered sequence of rules, said subset of rules is an ordered sub-sequence of said ordered sequence of rules, and in said step of comparing a data packet, said data packet is compared to the rules in the order defined by the ordered sequence (see page 3, lines 10-23 et seq).

As to claim 4,

Ke teaches said subset of rules, an entity which is authorized to modify said subset, is specified (see page 13, lines 22-33, Fig. 6b).

As to claim 5,

Ke teaches at least one rule belonging to said subset of rules comprises a generic information portion, said generic information portion to be replaced with second information before a data packet is compared to said at least one rule (see page 13, lines 22-33 et seq).

As to claim 6,

Ke teaches said screening information comprises a first part, which is modifiable by an entity authorized to configure said gateway element, and a second part, which is modifiable by an entity specifically authorized to modify said second part (see page 3, lines 6-23 et seq).

Claim 13-14 and 17 have the same scope as of claims 1 and 2 and essentially rejected for the same rationale as discussed above.

Ke does not explicitly indicate the claimed "hierarchical structure".

Coss discloses the claimed hierarchical structure (calling for inclusion of packet packet data from certain different category "hierarchical", see page 7, lines 45-50, Fig. 8).

It would have been obvious to one ordinary skill in the gateway network processing art at the time of the present invention to combined the cited references because the hierarchical structure of Coss teachings would have allowed Ke's system to improve the processing efficiency, security in the rule based information, as suggested by Coss, at page 3, lines 35-41 et seq. Hierarchical structure as taught by Coss improves the rule set applied to any packet to determine information as incoming and outgoing network interface (see page 3, lines 39-41 et seq, Coss).

With respect to claim 15,

Ke discloses a data structure comprising screening information (see page 3, lines 9-23), wherein said screening information is hierarchically structured so that it comprises a first rule (see page 4, lines 15-20 et seq), which specifies first header information, and a subset of rules relating to said first rule, said first header information being common to said rules belonging to said subset of rules (see page 8, lines 8-21).

Ke does not explicitly indicate the claimed "hierarchical structure".

Coss discloses the claimed hierarchical structure (calling for inclusion of packet packet data from certain different category "hierarchical", see page 7, lines 45-50, Fig. 8).

It would have been obvious to one ordinary skill in the gateway network processing art at the time of the present invention to combined the cited references

because the hierarchical structure of Coss teachings would have allowed Ke's system to improve the processing efficiency, security in the rule based information, as suggested by Coss, at page 3, lines 35-41 et seq. Hierarchical structure as taught by Coss improves the rule set applied to any packet to determine information as incoming and outgoing network interface (see page 3, lines 39-41 et seq, Coss).

As to claim 16,

Ke teaches characterized in that said subset of rules comprises a second rule which specifies second header information (see page 3, lines 25-34), and a second subset of rules, said second subset of rules relating to said second rule, said second header information being common to said rules belonging to said second subset of rules (see page 8, lines 8-21, Fig. 6a).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is (571) 272-4105. The examiner can normally be reached on Monday-Thursday (7:30 am-6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mohammad Ali
Primary Examiner
Art Unit 2167

MA
March 16, 2005